

Notice of Allowability

Application No.

09/454,057

Examiner

Chau Nguyen

Applicant(s)

DOERENBERG ET AL.

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/13/2006.
2. ☒ The allowed claim(s) is/are 1,2,4,5,9-15 and 30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 02/01/2007.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


Heather R. Herndon
Supervisory Patent Examiner
Technology Center 2100

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicant's representative, Mr. Michael Smith on February 1, 2007.

The application has been amended as follows:

1. (Previously Presented): A network topology backplane bus architecture comprising:

four independent data communication lines;

a plurality of processing nodes sharing said independent data communication lines for data communication;

one or more of said processing nodes associated with a first enclosure being normally connected for transmitting on first and second of said data communication lines and being normally connected for receiving on all of said data communication lines, wherein the one or more of said processing nodes associated with a first enclosure does not transmit on third and fourth of said data communication lines; and

one or more other processing nodes associated with a second enclosure being normally connected for transmitting on third and fourth of said data lines and being

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normally connected for receiving on all of said data lines, wherein the one or more of said other processing nodes associated with a second enclosure does not transmit on the first and second data communication lines.

2. (Previously Presented): The network topology backplane bus architecture recited in claim 1, wherein the first and third independent data communication lines comprises a first independent data communication network and the second and fourth independent data communication lines comprise a second independent data communication network.

3. (Canceled)

4. (Previously Presented): The network topology backplane bus architecture recited in claim 1, wherein said processing nodes associated with the first enclosure utilize at least one of said first and second data communication lines for local communication with other nodes associated with the first enclosure.

5. (Previously Presented): The network topology backplane bus architecture recited in claim 4, wherein said processing nodes associated with the first enclosure utilize at least one of said first and second data communication lines for broadcasting transmissions to processing nodes associated with the second enclosure.

6-8. (Canceled)

9. (Previously Presented): The network topology backplane bus architecture recited in claim 5, wherein each of plurality of processing nodes associated with the first enclosure time-shares at least one of said first and second data communication lines with the other processing nodes associated with the first enclosure.

10. (Previously Presented): The network topology backplane bus architecture recited in claim 9, wherein timesharing said data communication lines is synchronized.

11. (Previously Presented): The network topology backplane bus architecture recited in claim 5, wherein said processing nodes associated with the second enclosure utilize at least one of said third and fourth data communication lines for local communication with other nodes associated with the first enclosure.

12. (Previously Presented): The network topology backplane bus architecture recited in claim 11, wherein said processing nodes associated with the second enclosure utilize at least one of said third and fourth data communication lines for broadcasting transmissions to processing nodes associated with the first enclosure.

13. (Original): The network topology backplane bus architecture recited in claim 12, wherein ones of said processing nodes supports different ones of flight critical functions.

14. (Original): The network topology backplane bus architecture recited in claim 13, wherein one or more of said processing nodes supporting one of said flight critical functions is duplicated in one or more additional ones of said processing nodes.

15. (Previously Presented): The network topology backplane bus architecture recited in claim 14, wherein one of said processing nodes supporting said one of said flight critical functions is located in the first enclosure; and at least one of said additional processing nodes supporting said one of said flight critical functions is located in the second enclosure.

16-29. (Canceled)

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30. (Currently Amended): A method of sharing independent data communication lines for fault tolerant data communication among a plurality of processing nodes, the method comprising:

 permitting one or more first processing nodes associated with a first enclosure transmitting privileges on a first and a second data communication lines;

 permitting one or more second processing nodes associated with a second enclosure transmitting privileges on a third and a fourth data communication lines; and

 providing all the nodes receiving privileges on all of the data communication lines,

 wherein the transmitting privileges are not permitted for the one or more first processing nodes on the ~~first and second~~ third and fourth data communication lines and the transmitting privileges are not permitted for the one or more second processing nodes on the ~~third and fourth~~ first and second data communication lines.

31-34. (Canceled)


Heather R. Herndon
Supervisory Patent Examiner
Technology Center 2100